```
=> HCV
         14830 HCV
            24 HCVS
L1       14834 HCV
                 (HCV OR HCVS)

=> mutation (l) 2204
        283139 MUTATION
        186202 MUTATIONS
        353481 MUTATION
                 (MUTATION OR MUTATIONS)
           432 2204
L2           6 MUTATION (L) 2204

=> mutation (L) 1067
        283139 MUTATION
        186202 MUTATIONS
        353481 MUTATION
                 (MUTATION OR MUTATIONS)
          1009 1067
L3          21 MUTATION (L) 1067

=> Mutation (L) 1691
        283139 MUTATION
        186202 MUTATIONS
        353481 MUTATION
                 (MUTATION OR MUTATIONS)
           562 1691
L4          71 MUTATION (L) 1691

=> Mutation (L) 2080
        283139 MUTATION
        186202 MUTATIONS
        353481 MUTATION
                 (MUTATION OR MUTATIONS)
          1485 2080
L5           5 MUTATION (L) 2080

=> Mutation (L) 1655
        283139 MUTATION
        186202 MUTATIONS
        353481 MUTATION
                 (MUTATION OR MUTATIONS)
           990 1655
L6          12 MUTATION (L) 1655

=> Mutation (L) 2040
        283139 MUTATION
        186202 MUTATIONS
        353481 MUTATION
                 (MUTATION OR MUTATIONS)
          1697 2040
L7          11 MUTATION (L) 2040

=> Mutation (L) 1188
        283139 MUTATION
        186202 MUTATIONS
        353481 MUTATION
                 (MUTATION OR MUTATIONS)
           847 1188
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L8          17 MUTATION (L) 1188

=> L2 and L3
L9           1 L2 AND L3

=> L2 and L4
L10          1 L2 AND L4

=> L2 and L5
L11          1 L2 AND L5

=> L2 and L6
L12          1 L2 AND L6

=> L2 and L7
L13          1 L2 AND L7

=> L1 and L3
L14          1 L1 AND L3

=> L1 and L4
L15          2 L1 AND L4

=> L1 and L5
L16          1 L1 AND L5

=> L1 qnd L6
MISSING OPERATOR L1 QND
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> L1 and L6
L17          1 L1 AND L6

=> D L15 IBIB ABS 1-2

L15  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2005:523226  CAPLUS
DOCUMENT NUMBER:         143:54458
TITLE:                   Replication competent hepatitis C virus genotype 1a
                         with adaptive mutations and methods of use for drug
                         screening and selection of host cell line
INVENTOR(S):             Lemon, Stanley M.; Yi, Minkyung
PATENT ASSIGNEE(S):      Board of Regents, the University of Texas System, USA
SOURCE:                  PCT Int. Appl., 102 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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     WO 2005053516        A2    20050616    WO 2004-US40120        20041201
     WO 2005053516        A3    20051229
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1694694 A2 20060830 EP 2004-812596 20041201

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

US 20070292840 A1 20071220 US 2007-580979 20070409

PRIORITY APPLN. INFO.: US 2003-525989P P 20031201

WO 2004-US40120 W 20041201

AB The invention provides replication competent polynucleotides that include a coding sequence encoding a hepatitis C virus polyprotein having adaptive mutations. The genotype 1a adaptive mutations identified here can be grouped functionally into two groups: K2040R, F2080V, and S2204I, which are all located within NS5A, and Q1067R, G1188R, V1655I, and K1691R (in NS4A), which are all located in or associated with the protease domain of NS3. These NS3 and NS4A mutations are located at some distance from other genotype 1a adaptive mutations in NS3 that were previously described. The contribution of the NS5A adaptive mutations to the replication of genotype 1a RNA appears to be additive to that of the NS3/4A mutations and not synergistic as shown for the combination of Q1067R and K1691R. The invention also includes methods for making replication competent polynucleotides, identifying a compound that inhibits replication of a replication competent polynucleotide, selecting a replication competent polynucleotide, and detecting a replication competent polynucleotide.

L15 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:504935 CAPLUS

DOCUMENT NUMBER: 137:74392

TITLE: Self-replicating RNA molecule from hepatitis C virus having adaptive mutations, and its uses in screening assay for HCV replication inhibitors

INVENTOR(S): Kukolj, George; Pause, Arnim

PATENT ASSIGNEE(S): Boehringer Ingelheim (Canada) Ltd., Can.

SOURCE: PCT Int. Appl., 140 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002052015	A2	20020704	WO 2001-CA1843	20011220
WO 2002052015	A3	20031120		
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2430607	A1	20020704	CA 2001-2430607	20011220
AU 2002218906	A1	20020708	AU 2002-218906	20011220
AU 2002218906	B2	20060803		
HU 2003002593	A2	20031028	HU 2003-2593	20011220
EP 1379660	A2	20040114	EP 2001-271930	20011220

EP 1379660	B1	20070606			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2004516039	T	20040603	JP 2002-553495		20011220
NZ 527035	A	20060224	NZ 2001-527035		20011220
AT 364085	T	20070615	AT 2001-271930		20011220
ES 2287074	T3	20071216	ES 2001-271930		20011220
US 20020142350	A1	20021003	US 2001-29907		20011221
US 6706874	B2	20040316			
US 20030148348	A1	20030807	US 2002-309561		20021204
US 6956117	B2	20051018			
MX 2003PA05638	A	20040405	MX 2003-PA5638		20030620
US 20040203020	A1	20041014	US 2003-686835		20031016
US 20040180333	A1	20040916	US 2004-789355		20040227
US 7344723	B2	20080318			
US 20060246424	A1	20061102	US 2006-390632		20060328
JP 2006304803	A	20061109	JP 2006-158565		20060607
PRIORITY APPLN. INFO.:			US 2000-257857P	P	20001222
			JP 2002-553495	A3	20011220
			WO 2001-CA1843	W	20011220
			US 2001-29907	A3	20011221
			US 2002-309561	A3	20021204
			US 2003-686835	A1	20031016

AB The present invention relates generally to a hepatitis C virus (HCV) RNA mol. that self-replicates in appropriate cell lines, particularly to a self-replicating HCV RNA construct having an enhanced efficiency of establishing cell culture replication. A unique HCV RNA mol. is provided having an enhanced efficiency of establishing cell culture replication. Novel adaptive mutations have been identified within the HCV non-structural region that improves the efficiency of establishing persistently replicating HCV RNA in cell culture. This self-replicating polynucleotide mol. contains, contrary to all previous reports, a 5'-NTR that can be either an A as an alternative to the G already disclosed and therefore provides an alternative to existing systems comprising a self-replicating HCV RNA mol. The G-->A mutation gives rise to HCV RNA mols. that, in conjunction with mutations in the HCV non-structural region, such as the G(2042)C/R mutations, possess greater efficiency of transduction and/or replication. The HCV RNA encoding polyprotein comprising one or more amino acid substitution selected from the group consisting of: R(1135)K; S(1148)G; S(1560)G; K(1691)R; L(1701)F; I(1984)V; T(1993)A; G(2042)C; G(2042)R; S(2404)P; L(2155)P; P(2166)L; M(2992)T; and E(1202)G is claimed. These RNA mols. when transfected in a cell line are useful for evaluating potential inhibitors of HCV replication.

=> D L9 IBIB ABS

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	2005:523226 CAPLUS
DOCUMENT NUMBER:	143:54458
TITLE:	Replication competent hepatitis C virus genotype 1a with adaptive mutations and methods of use for drug screening and selection of host cell line
INVENTOR(S):	Lemon, Stanley M.; Yi, Minkyung
PATENT ASSIGNEE(S):	Board of Regents, the University of Texas System, USA
SOURCE:	PCT Int. Appl., 102 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005053516	A2	20050616	WO 2004-US40120	20041201
WO 2005053516	A3	20051229		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1694694	A2	20060830	EP 2004-812596	20041201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
US 20070292840	A1	20071220	US 2007-580979	20070409
PRIORITY APPLN. INFO.:			US 2003-525989P	P 20031201
			WO 2004-US40120	W 20041201

AB The invention provides replication competent polynucleotides that include a coding sequence encoding a hepatitis C virus polyprotein having adaptive mutations. The genotype 1a adaptive mutations identified here can be grouped functionally into two groups: K2040R, F2080V, and S2204I, which are all located within NS5A, and Q1067R, G1188R, V1655I, and K1691R (in NS4A), which are all located in or associated with the protease domain of NS3. These NS3 and NS4A mutations are located at some distance from other genotype 1a adaptive mutations in NS3 that were previously described. The contribution of the NS5A adaptive mutations to the replication of genotype 1a RNA appears to be additive to that of the NS3/4A mutations and not synergistic as shown for the combination of Q1067R and K1691R. The invention also includes methods for making replication competent polynucleotides, identifying a compound that inhibits replication of a replication competent polynucleotide, selecting a replication competent polynucleotide, and detecting a replication competent polynucleotide.

=> D L10 IBIB BAS
'BAS' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO

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SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):IBIB

L10  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2005:523226  CAPLUS
DOCUMENT NUMBER:          143:54458
TITLE:                    Replication competent hepatitis C virus genotype 1a
                          with adaptive mutations and methods of use for drug
                          screening and selection of host cell line
INVENTOR(S):              Lemon, Stanley M.; Yi, Minkyung
PATENT ASSIGNEE(S):       Board of Regents, the University of Texas System, USA
SOURCE:                   PCT Int. Appl., 102 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005053516	A2	20050616	WO 2004-US40120	20041201
WO 2005053516	A3	20051229		
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EP 1694694	A2	20060830	EP 2004-812596	20041201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
US 20070292840	A1	20071220	US 2007-580979	20070409
PRIORITY APPLN. INFO.:			US 2003-525989P	P 20031201
			WO 2004-US40120	W 20041201

=> D L11 IBIB ABS

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:523226 CAPLUS
DOCUMENT NUMBER: 143:54458
TITLE: Replication competent hepatitis C virus genotype 1a with adaptive mutations and methods of use for drug screening and selection of host cell line
INVENTOR(S): Lemon, Stanley M.; Yi, Minkyung
PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA
SOURCE: PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005053516	A2	20050616	WO 2004-US40120	20041201
WO 2005053516	A3	20051229		
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EP 1694694	A2	20060830	EP 2004-812596	20041201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
US 20070292840	A1	20071220	US 2007-580979	20070409
PRIORITY APPLN. INFO.:			US 2003-525989P	P 20031201
			WO 2004-US40120	W 20041201

AB The invention provides replication competent polynucleotides that include

a coding sequence encoding a hepatitis C virus polyprotein having adaptive mutations. The genotype 1a adaptive mutations identified here can be grouped functionally into two groups: K2040R, F2080V, and S2204I, which are all located within NS5A, and Q1067R, G1188R, V1655I, and K1691R (in NS4A), which are all located in or associated with the protease domain of NS3. These NS3 and NS4A mutations are located at some distance from other genotype 1a adaptive mutations in NS3 that were previously described. The contribution of the NS5A adaptive mutations to the replication of genotype 1a RNA appears to be additive to that of the NS3/4A mutations and not synergistic as shown for the combination of Q1067R and K1691R. The invention also includes methods for making replication competent polynucleotides, identifying a compound that inhibits replication of a replication competent polynucleotide, selecting a replication competent polynucleotide, and detecting a replication competent polynucleotide.

=> D L12 IBIB ABS

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:523226 CAPLUS
DOCUMENT NUMBER: 143:54458
TITLE: Replication competent hepatitis C virus genotype 1a with adaptive mutations and methods of use for drug screening and selection of host cell line
INVENTOR(S): Lemon, Stanley M.; Yi, Minkyung
PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA
SOURCE: PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005053516	A2	20050616	WO 2004-US40120	20041201
WO 2005053516	A3	20051229		
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EP 1694694	A2	20060830	EP 2004-812596	20041201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
US 20070292840	A1	20071220	US 2007-580979	20070409
PRIORITY APPLN. INFO.:			US 2003-525989P	P 20031201
			WO 2004-US40120	W 20041201

AB The invention provides replication competent polynucleotides that include a coding sequence encoding a hepatitis C virus polyprotein having adaptive mutations. The genotype 1a adaptive mutations identified here can be grouped functionally into two groups: K2040R, F2080V, and S2204I, which are all located within NS5A, and Q1067R, G1188R, V1655I, and K1691R (in NS4A), which are all located in or associated with the protease domain of NS3. These NS3 and NS4A mutations are located at some distance from other

genotype 1a adaptive mutations in NS3 that were previously described. The contribution of the NS5A adaptive mutations to the replication of genotype 1a RNA appears to be additive to that of the NS3/4A mutations and not synergistic as shown for the combination of Q1067R and K1691R. The invention also includes methods for making replication competent polynucleotides, identifying a compound that inhibits replication of a replication competent polynucleotide, selecting a replication competent polynucleotide, and detecting a replication competent polynucleotide.

=> D L13 IBIB ABS

L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:523226 CAPLUS
DOCUMENT NUMBER: 143:54458
TITLE: Replication competent hepatitis C virus genotype 1a with adaptive mutations and methods of use for drug screening and selection of host cell line
INVENTOR(S): Lemon, Stanley M.; Yi, Minkyung
PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA
SOURCE: PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005053516	A2	20050616	WO 2004-US40120	20041201
WO 2005053516	A3	20051229		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1694694	A2	20060830	EP 2004-812596	20041201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
US 20070292840	A1	20071220	US 2007-580979	20070409
PRIORITY APPLN. INFO.:			US 2003-525989P	P 20031201
			WO 2004-US40120	W 20041201

AB The invention provides replication competent polynucleotides that include a coding sequence encoding a hepatitis C virus polyprotein having adaptive mutations. The genotype 1a adaptive mutations identified here can be grouped functionally into two groups: K2040R, F2080V, and S2204I, which are all located within NS5A, and Q1067R, G1188R, V1655I, and K1691R (in NS4A), which are all located in or associated with the protease domain of NS3. These NS3 and NS4A mutations are located at some distance from other genotype 1a adaptive mutations in NS3 that were previously described. The contribution of the NS5A adaptive mutations to the replication of genotype 1a RNA appears to be additive to that of the NS3/4A mutations and not synergistic as shown for the combination of Q1067R and K1691R. The invention also includes methods for making replication competent polynucleotides, identifying a compound that inhibits replication of a

replication competent polynucleotide, selecting a replication competent polynucleotide, and detecting a replication competent polynucleotide.